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#12



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DATE: 06/17/2002  
TIME: 14:04:35

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/905,253A

Input Set : A:\Mzw1547.txt  
Output Set: N:\CRF3\06172002\I905253A.raw

3 <110> APPLICANT: Wittamer, Valerie  
4 Communi, David  
5 Vandenbogaerde, Ann  
6 Dethieux, Michel  
7 Parmentier, Marc  
9 <120> TITLE OF INVENTION: Natural Ligand of G Protein Coupled Receptor ChemR23 and  
Uses Thereof  
11 <130> FILE REFERENCE: 9409/2041  
13 <140> CURRENT APPLICATION NUMBER: US 09/905,253A  
C--> 14 <141> CURRENT FILING DATE: 2002-06-10  
16 <150> PRIOR APPLICATION NUMBER: US 60/303,858  
17 <151> PRIOR FILING DATE: 2001-07-09  
19 <160> NUMBER OF SEQ ID NOS: 38  
21 <170> SOFTWARE: PatentIn version 3.0  
23 <210> SEQ ID NO: 1  
24 <211> LENGTH: 1112  
25 <212> TYPE: DNA  
26 <213> ORGANISM: Homo sapiens  
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31 gactccattg tggttttgga ggacttatcc cccttggaaag ccagggtgac caggatcttc 120  
33 ctgggtggtgg tctacagcat cgtctgcttc ctcggattc tgggcaatgg tctggtgatc 180  
35 atcattgcca ccttcaagat gaagaagaca gtgaacatgg tctggttcct caacctggca 240  
37 gtggcagatt tcctgttcaa cgtcttcctc ccaattccata tcaccttatgc cgccatggac 300  
39 taccactggg ttttcgggac accatgtgc aagatcagca acttccttct catccacaac 360  
41 atgttaccca gcgtcttcct gctgaccatc atcagctctg accgctgcat ctctgtgctc 420  
43 ctccctgtct ggtcccagaa ccacccgac gttccgttgc cttacatggc ctgcatggtc 480  
45 atctgggtcc tggctttctt cttgagttcc ccattctcg tcttccggga cacagccaaac 540  
47 ctgcattggaa aaatactctg cttcaacaac ttcagctgt ccacacctgg gtcttcctcg 600  
49 tggcccactc actcccaaatt ggaccctgtg gggatagcc ggcacatggt ggtgactgtc 660  
51 acccgcttcc tctgtggctt cctggtccca gtcctcatca tcacagctt ctacccatc 720  
53 atcgtctgca aactgcagcg caacccgctg gccaagacca agaaggccctt caagattatt 780  
55 gtgaccatca tcattacatt ctccctctgc tgggtccctt accacacactt caacccatc 840  
57 gagctccacc acactgccat gcctggctct gtcttcagcc tgggtttgcc cctggccact 900  
59 gcccttgcca ttgccaacag ctgcattgaac cccatctgt atgtttcat ggtcaggact 960  
61 tcaagaagtt caagggtggcc ctcttccttc gcctggtaaa tgctctaagt gaagatacag 1020  
63 gccaactcttc tctacccacatcataaagat ttaccaagat gtcaatgaat gagaggactt 1080  
65 ctatgaatga gaggagacc ggcattgtttt ga 1112  
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69 <211> LENGTH: 371  
70 <212> TYPE: PRT  
71 <213> ORGANISM: Homo sapiens  
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76	1	5	10	15
78	Pro Asp Tyr Leu Asp Ser Ile Val Val Leu Glu Asp Leu Ser Pro Leu			
79	20	25	30	
81	Glu Ala Arg Val Thr Arg Ile Phe Leu Val Val Val Tyr Ser Ile Val			
82	35	40	45	
84	Cys Phe Leu Gly Ile Leu Gly Asn Gly Leu Val Ile Ile Ala Thr			
85	50	55	60	
87	Phe Lys Met Lys Lys Thr Val Asn Met Val Trp Phe Leu Asn Leu Ala			
88	65	70	75	80
90	Val Ala Asp Phe Leu Phe Asn Val Phe Leu Pro Ile His Ile Thr Tyr			
91	85	90	95	
93	Ala Ala Met Asp Tyr His Trp Val Phe Gly Thr Ala Met Cys Lys Ile			
94	100	105	110	
96	Ser Asn Phe Leu Leu Ile His Asn Met Phe Thr Ser Val Phe Leu Leu			
97	115	120	125	
99	Thr Ile Ile Ser Ser Asp Arg Cys Ile Ser Val Leu Leu Pro Val Trp			
100	130	135	140	
102	Ser Gln Asn His Arg Ser Val Arg Leu Ala Tyr Met Ala Cys Met Val			
103	145	150	155	160
105	Ile Trp Val Leu Ala Phe Phe Leu Ser Ser Pro Ser Leu Val Phe Arg			
106	165	170	175	
108	Asp Thr Ala Asn Leu His Gly Lys Ile Ser Cys Phe Asn Asn Phe Ser			
109	180	185	190	
111	Leu Ser Thr Pro Gly Ser Ser Ser Trp Pro Thr His Ser Gln Met Asp			
112	195	200	205	
114	Pro Val Gly Tyr Ser Arg His Met Val Val Thr Val Thr Arg Phe Leu			
115	210	215	220	
117	Cys Gly Phe Leu Val Pro Val Leu Ile Ile Thr Ala Cys Tyr Leu Thr			
118	225	230	235	240
120	Ile Val Cys Lys Leu Gln Arg Asn Arg Leu Ala Lys Thr Lys Lys Pro			
121	245	250	255	
123	Phe Lys Ile Ile Val Thr Ile Ile Ile Thr Phe Phe Leu Cys Trp Cys			
124	260	265	270	
126	Pro Tyr His Thr Leu Asn Leu Leu Glu Leu His His Thr Ala Met Pro			
127	275	280	285	
129	Gly Ser Val Phe Ser Leu Gly Leu Pro Leu Ala Thr Ala Leu Ala Ile			
130	290	295	300	
132	Ala Asn Ser Cys Met Asn Pro Ile Leu Tyr Val Phe Met Gly Gln Asp			
133	305	310	315	320
135	Phe Lys Lys Phe Lys Val Ala Leu Phe Ser Arg Leu Val Asn Ala Leu			
136	325	330	335	
138	Ser Glu Asp Thr Gly His Ser Ser Tyr Pro Ser His Arg Ser Phe Thr			
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142	355	360	365	
144	Gly Met Leu			
145	370			
147	<210> SEQ ID NO: 3			
148	<211> LENGTH: 1116			

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149 <212> TYPE: DNA  
 150 <213> ORGANISM: Mus musculus  
 152 <400> SEQUENCE: 3

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157	ctgggtgtga	tctacagctt	gtgtgtctc	ctcggtctcc	taggcaacgg	cctggtgatt	180										
159	gtcatcgcca	ccttcaagat	gaagaagacc	gtgaacactg	tgtggttgt	caacctggct	240										
161	gtggccgact	tcctgttcaa	catcttttg	ccgatgcaca	tcacctacgc	ggccatggac	300										
163	taccactggg	tgttcgggaa	ggccatgtgc	aagatcagca	acttcttgct	cagccacaac	360										
165	atgtacacca	gcgttccct	gctgactgtc	atcagctttg	accgctgcat	ctccgtgctg	420										
167	ctccccgtct	ggtcccagaa	ccaccgcagc	atcgcgctgg	cctacatgac	ctgctcgccc	480										
169	gtctgggtcc	tggcttctt	ctttagctcc	ccgtcccttg	tcttccggga	caccgccaac	540										
171	attcatggga	agataaacctg	tttcaacaac	ttcagcttgg	ccgcgcctga	gtcctcccca	600										
173	catccgcgcc	actcgcaagt	agtttccaca	gggtacagca	gacacgtggc	ggtcactgtc	660										
175	acccgcttcc	tttgcggctt	cctgatcccc	gtcttcatca	tcacggcctg	ctaccttacc	720										
177	atcgtcttca	agctgcagcg	caaccgcctg	gccaagaaca	agaagccctt	caagatcatc	780										
179	atcaccatca	tcatcacctt	tttccctctgc	tggtgccttacc	accacacccct	ctacctgctg	840										
181	gagctccacc	acacagctgt	gccaagctct	gtcttcagcc	tggggcttacc	cctggccacg	900										
183	gccgtcgcca	tcgccaacag	ctgcatgaac	cccattctgt	acgtcttcat	ggggccacgac	960										
185	ttcagaaaat	tcaaggtggc	cctttctcc	cgccgtggca	acgcccctgag	tgaggacaca	1020										
187	ggcccccct	cctacccctag	tcacaggagc	ttcaccaaga	tgtcgctttt	gaatgagaag	1080										
189	gcttcggtga	atgagaagga	gaccagtacc	ctctga			1116										
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193	<211>	LENGTH:	371														
194	<212>	TYPE:	PRT														
195	<213>	ORGANISM:	Mus musculus														
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200	1				5				10				15				
202	Ser	Asp	Gly	Phe	Gly	Tyr	Phe	Val	Asp	Leu	Glu	Glu	Ala	Ser	Pro	Trp	
203						20				25			30				
205	Glu	Ala	Lys	Val	Ala	Pro	Val	Phe	Leu	Val	Val	Ile	Tyr	Ser	Leu	Val	
206						35			40			45					
208	Cys	Phe	Leu	Gly	Leu	Leu	Gly	Asn	Gly	Leu	Val	Ile	Val	Ile	Ala	Thr	
209						50			55			60					
211	Phe	Lys	Met	Lys	Lys	Thr	Val	Asn	Thr	Val	Trp	Phe	Val	Asn	Leu	Ala	
212						65			70			75			80		
214	Val	Ala	Asp	Phe	Leu	Phe	Asn	Ile	Phe	Leu	Pro	Met	His	Ile	Thr	Tyr	
215						85			90			95					
217	Ala	Ala	Met	Asp	Tyr	His	Trp	Val	Phe	Gly	Lys	Ala	Met	Cys	Lys	Ile	
218						100			105			110					
220	Ser	Asn	Phe	Leu	Leu	Ser	His	Asn	Met	Tyr	Thr	Ser	Val	Phe	Leu	Leu	
221						115			120			125					
223	Thr	Val	Ile	Ser	Phe	Asp	Arg	Cys	Ile	Ser	Val	Leu	Leu	Pro	Val	Trp	
224						130			135			140					
226	Ser	Gln	Asn	His	Arg	Ser	Ile	Arg	Leu	Ala	Tyr	Met	Thr	Cys	Ser	Ala	
227						145			150			155			160		
229	Val	Trp	Val	Leu	Ala	Phe	Phe	Leu	Ser	Ser	Pro	Ser	Leu	Val	Phe	Arg	
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Input Set : A:\Mzw1547.txt

Output Set: N:\CRF3\06172002\I905253A.raw

232 Asp Thr Ala Asn Ile His Gly Lys Ile Thr Cys Phe Asn Asn Phe Ser  
 233 180 185 190  
 235 Leu Ala Ala Pro Glu Ser Ser Pro His Pro Ala His Ser Gln Val Val  
 236 195 200 205  
 238 Ser Thr Gly Tyr Ser Arg His Val Ala Val Thr Val Thr Arg Phe Leu  
 239 210 215 220  
 241 Cys Gly Phe Leu Ile Pro Val Phe Ile Ile Thr Ala Cys Tyr Leu Thr  
 242 225 230 235 240  
 244 Ile Val Phe Lys Leu Gln Arg Asn Arg Leu Ala Lys Asn Lys Lys Pro  
 245 245 250 255  
 247 Phe Lys Ile Ile Ile Thr Ile Ile Thr Phe Phe Leu Cys Trp Cys  
 248 260 265 270  
 250 Pro Tyr His Thr Leu Tyr Leu Leu Glu Leu His His Thr Ala Val Pro  
 251 275 280 285  
 253 Ser Ser Val Phe Ser Leu Gly Leu Pro Leu Ala Thr Ala Val Ala Ile  
 254 290 295 300  
 256 Ala Asn Ser Cys Met Asn Pro Ile Leu Tyr Val Phe Met Gly His Asp  
 257 305 310 315 320  
 259 Phe Arg Lys Phe Lys Val Ala Leu Phe Ser Arg Leu Ala Asn Ala Leu  
 260 325 330 335  
 262 Ser Glu Asp Thr Gly Pro Ser Ser Tyr Pro Ser His Arg Ser Phe Thr  
 263 340 345 350  
 265 Lys Met Ser Ser Leu Asn Glu Lys Ala Ser Val Asn Glu Lys Glu Thr  
 266 355 360 365  
 268 Ser Thr Leu  
 269 370  
 271 <210> SEQ ID NO: 5  
 272 <211> LENGTH: 1116  
 273 <212> TYPE: DNA  
 274 <213> ORGANISM: Rattus norvegicus  
 276 <400> SEQUENCE: 5

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 279 gactacatcg tggacttggg ggaggcgggt ccactggagg ccaaggtggc cgaggcttc 120  
 281 ctgggtgtaa tctacagctt ggtgtctc ctcggatcc taggcaatgg cctgggtatt 180  
 283 gtcatcgcca ccttcaagat gaagaagacg gtgaacaccg tgggtttgt caacctggcc 240  
 285 gtggctgact tcctgttcaa catcttcttgc cccatccaca tcacctatgc cgctatggac 300  
 287 taccactggg tggatggaa agccatgtgc aagattagta gctttctgt aagccacaac 360  
 289 atgtacacca gcgttccct gtcactgtc atcagcttc accgctgcat ctccgtgctc 420  
 291 ctccccgtct ggtcccgagaa ccacccgacgt gtcgtctgg cttacatgac ctgcgtgggt 480  
 293 gtctgggtct ggcttcttc tggatctccc ccgtccctcg tcttcggaca cgtcagcacc 540  
 295 agccacggga agataacctg cttcaacaac ttcaacccatgg cggcccccga gccttctct 600  
 297 cattccaccc accccgcaac agacccggta ggttacagca gacatgtggc gtcaccgtc 660  
 299 accccgttcc tctgtggctt cctgatcccc gtcttcatca tcacggctcg ttacctcacc 720  
 301 atcgttccatca agttggcagcg caaccggccag gccaagacca agaaggccctt caagatcatc 780  
 303 atcaccatca tcatcacctt cttccctctgc tggactccctt accacacact ctactgtcg 840  
 305 gagctccacc acacggctgt ggcacccctt gtcttccatca tggactgccc cctggccaca 900  
 307 ggcgtcgcca tcgccaacag ctgtatgaac cccatccctgt acgttccat gggccacgac 960  
 309 ttcaaaaaat tcaagggtggc cttttctcc cgcctggta atgcctgag cgaggacaca 1020  
 311 ggaccctccat cttaccatca tcacaggagc ttacccaaga tggatggatcatt gattgagaag 1080

RAW SEQUENCE LISTING  
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Output Set: N:\CRF3\06172002\I905253A.raw

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 317 <211> LENGTH: 371  
 318 <212> TYPE: PRT  
 319 <213> ORGANISM: Rattus norvegicus  
 321 <400> SEQUENCE: 6  
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 326 Ser Asp Gly Ser Asp Tyr Ile Val Asp Leu Glu Ala Gly Pro Leu  
 327 20 25 30  
 329 Glu Ala Lys Val Ala Glu Val Phe Leu Val Val Ile Tyr Ser Leu Val  
 330 35 40 45  
 332 Cys Phe Leu Gly Ile Leu Gly Asn Gly Leu Val Ile Val Ile Ala Thr  
 333 50 55 60  
 335 Phe Lys Met Lys Lys Thr Val Asn Thr Val Trp Phe Val Asn Leu Ala  
 336 65 70 75 80  
 338 Val Ala Asp Phe Leu Phe Asn Ile Phe Leu Pro Ile His Ile Thr Tyr  
 339 85 90 95  
 341 Ala Ala Met Asp Tyr His Trp Val Phe Gly Lys Ala Met Cys Lys Ile  
 342 100 105 110  
 344 Ser Ser Phe Leu Leu Ser His Asn Met Tyr Thr Ser Val Phe Leu Leu  
 345 115 120 125  
 347 Thr Val Ile Ser Phe Asp Arg Cys Ile Ser Val Leu Leu Pro Val Trp  
 348 130 135 140  
 350 Ser Gln Asn His Arg Ser Val Arg Leu Ala Tyr Met Thr Cys Val Val  
 351 145 150 155 160  
 353 Val Trp Val Trp Leu Ser Ser Glu Ser Pro Pro Ser Leu Val Phe Gly  
 354 165 170 175  
 356 His Val Ser Thr Ser His Gly Lys Ile Thr Cys Phe Asn Asn Phe Ser  
 357 180 185 190  
 359 Leu Ala Ala Pro Glu Pro Phe Ser His Ser Thr His Pro Arg Thr Asp  
 360 195 200 205  
 362 Pro Val Gly Tyr Ser Arg His Val Ala Val Thr Val Thr Arg Phe Leu  
 363 210 215 220  
 365 Cys Gly Phe Leu Ile Pro Val Phe Ile Ile Thr Ala Cys Tyr Leu Thr  
 366 225 230 235 240  
 368 Ile Val Phe Lys Leu Gln Arg Asn Arg Gln Ala Lys Thr Lys Lys Pro  
 369 245 250 255  
 371 Phe Lys Ile Ile Ile Thr Ile Ile Thr Phe Phe Leu Cys Trp Cys  
 372 260 265 270  
 374 Pro Tyr His Thr Leu Tyr Leu Leu Glu Leu His His Thr Ala Val Pro  
 375 275 280 285  
 377 Ala Ser Val Phe Ser Leu Gly Leu Pro Leu Ala Thr Ala Val Ala Ile  
 378 290 295 300  
 380 Ala Asn Ser Cys Met Asn Pro Ile Leu Tyr Val Phe Met Gly His Asp  
 381 305 310 315 320  
 383 Phe Lys Lys Phe Lys Val Ala Leu Phe Ser Arg Leu Val Asn Ala Leu  
 384 325 330 335  
 386 Ser Glu Asp Thr Gly Pro Ser Ser Tyr Pro Ser His Arg Ser Phe Thr

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/905,253A

DATE: 06/17/2002  
TIME: 14:04:36

Input Set : A:\Mzw1547.txt  
Output Set: N:\CRF3\06172002\I905253A.raw

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L:528 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11  
L:541 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12  
L:791 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:37  
L:804 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:38